

WHAT IS CLAIMED IS:

1. A developing apparatus comprising:

5 a developer carrying member, for carrying a developer to a developing portion, said developer carrying member including an electroconductive base and a resistance layer provided thereon;

10 a developer feeding member for being supplied with a voltage to supply the developer to said developer carrying member;

15 wherein a surface moving speed of said developer carrying member  $V_p$  [ mm/sec ], a resistance  $R_1$  ( $\Omega$ ) of said developer carrying member when an electric current applied said developer carrying member is  $0.04V_p$  [  $\mu A$  ], and a resistance  $R_2$  ( $\Omega$ ) of said developer carrying member when the electric current applied to said developer carrying member is  $4V_p$  [  $\mu A$  ], satisfy:

$$r_1/R_2 < 15.$$

20

2. An apparatus according to Claim 1, wherein the resistance  $R_1$  satisfies  $R_1 < 108\Omega$ , and the resistance  $R_2$  satisfies  $105\Omega \leq R_2$ .

25

3. An apparatus according to Claim 1, wherein  $r_1/R_2 < 5$  is satisfied.

4. An apparatus according to Claim 1 or 2,  
wherein the voltage is not less than a discharge  
starting voltage at which electric discharge starts  
between said developer carrying member and said  
5 developer feeding member.

5. An apparatus according to Claim 1 or 2,  
wherein when an electric current applied to said base  
is  $4V_p$  [  $\mu A$  ], a potential  $V_1$  (V) of said base and a  
10 surface potential  $V_2$  (V) of said developer carrying  
member at said developing portion, satisfy:  
$$0.8 < V_2/V_1 < 1.2.$$

6. An apparatus according to Claim 1 or 2,  
15 wherein said developer feeding member is supplied with  
the voltage such that not less than  $0.08V_p$  [  $\mu A$  ]  
current of the same charge polarity as the developer  
flows from said developer feeding member to said  
developer carrying member.

20

7. An apparatus according to Claim 1, wherein  
said developer feeding member is in the form of  
electroconductive wire.

25

8. An apparatus according to Claim 7, wherein  
said electroconductive wire is not rotatable.

9. An apparatus according to Claim 1, wherein a portion around a periphery of said developer feeding member is filled with the developer at least when said developer feeding member is driven.

5

10. An apparatus according to Claim 1, wherein said developing apparatus is detachably mountable to a main assembly of an image forming apparatus.

10

11. An apparatus according to Claim 1, wherein said developing device is detachably mountable to a main assembly of an image forming apparatus together with an image bearing member for which said developing device is operable for development.

15

12.1. A developing apparatus comprising:

a developer carrying member, for carrying a developer to a developing portion, said developer carrying member including an electroconductive base and a resistance layer provided thereon;

20

a developer feeding member for being supplied with a voltage to supply the developer to said developer carrying member;

25

wherein a surface moving speed  $V_p$  [ mm/sec ] of said developer carrying member, a potential  $V_1$  (V) of said base layer when an electric current applied to said base is  $4V_p$  [  $\mu A$  ], and a surface potential  $V_2$  of

said developer carrying member at said developing portion, satisfy

$$0.8 < V_2/V_1 < 1.2.$$

5           13. An apparatus according to Claim 12, wherein the voltage is not less than a discharge starting voltage at which electric discharge starts between said developer carrying member and said developer feeding member.

10           14. An apparatus according to Claim 12, wherein said developer feeding member is supplied with the voltage such that not less than  $0.08V_p$  [  $\mu A$  ] current or the same charge polarity as the developer flows from said developer feeding member to said developer carrying member.

15           15. An apparatus according to Claim 12, wherein said developer feeding member is in the form of  
20           electroconductive wire.

          16. An apparatus according to Claim 15, wherein said electroconductive wire is not rotatable.

25           17. An apparatus according to Claim 12, wherein a portion around a periphery of said developer feeding member is filled with the developer at least when said

developer feeding member is driven.

18. An apparatus according to Claim 12, wherein  
said developing apparatus is detachably mountable to a  
5 main assembly of an image forming apparatus.

10

15

20

25